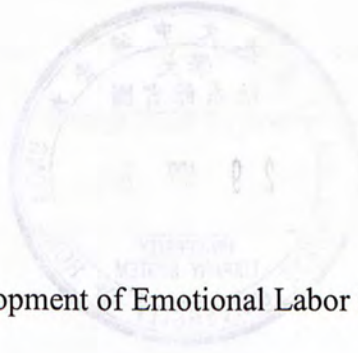


Running head: EMOTIONAL LABOR SCALE DEVELOPMENT



The Development of Emotional Labor Scale

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Abstract

This project reports on the development and preliminary validation of an Emotional Labor Inventory (ELI) on a Chinese employees sample. The ELI is a self-report questionnaire that measures multi-facet aspects of emotional labor in the workplace. It includes frequency, duration and variety of emotional expression during interaction with clients, emotional dissonance, display rule, employees' perception towards abiding to display rules, monitoring own and clients emotions, deep acting and surface acting. Exploratory factor analysis yielded a three-factor solution and extracted factors included Emotional Sensitivity and Control, Emotional Dissonance and Emotional Labor Work Conditions with satisfactory internal consistency, though subsequent confirmatory factor analysis did not clearly support the three-factor structure of this newly developed inventory. Dimensions of the ELI correlated significantly with several job-related and psychological variables, including absenteeism, job satisfaction, burnout and psychological distress. Implication of emotional labor to the organization was also discussed.

摘要

本研究旨在建立情緒勞工量表(Emotional Labor Inventory, ELI)。情緒勞工量表用作量度情緒勞工不同的方面，例如接待顧客頻率(Frequency of Interaction)，接待顧客的時間長短 (Duration of Interaction)以及情感表現種類 (Variety of Emotion Display)，情感失諧 (Emotional Dissonance)，機構所設定的情感表現方式(Display Rule)及員工對這類方式的觀感 (Employees' Perception of Display Rule)，留意自我及顧客的情感 (Monitoring Self and Clients' Emotions)，深入情感表現 (Deep Acting) 及表面情感表現(Surface Acting)。探索因子分析(Exploratory Factor Analysis) 歸納出三個因子，包括情感敏銳及控制性 (Emotional Sensitivity and Control)，情感失諧 (Emotional Dissonance) 以及情緒勞工的工作條件 (Emotional Labor Work Conditions)，不過驗證因子分析(Confirmatory Factor Analysis) 並不能明確證明情緒勞工量表中三因子的特質。本研究證明情緒勞工量表和曠職，離職意向，工作滿足感，情感耗盡和情感憂傷有著顯著的關係。

THE DEVELOPMENT OF EMOTIONAL LABOR SCALE

The role of emotions has been ignored in the study of organizational behavior (Arvey, Renz, & Watson, 1998; Muchinsky, 2000; Putnam & Mumby, 1993), though emotions and emotion management is a prominent feature of organizational life (Mann, 1999; Morris & Feldman, 1996). The emphasis of situational determinism in the organization (House, Shane & Herold, 1996) and the view of the workplace as a rational environment (Grandey, 2000; Whyte, 1956) have contributed to the overlook of emotions in the workplace. It is only in the last decade that the display of emotions in organizations has become a topic of greater interest to organizational researchers (Abraham, 1998; Adelman, 1995; Ashforth & Humphrey, 1995; Brotheridge & Lee, 1998; Morris & Feldman, 1996; Rafaeli & Sutton, 1987). Growing research has documented the importance of understanding the role of emotions and organizational behaviors as well as performance of employees (Arvey, Renz, & Watson, 1998; Pugliesi, 1999; Wharton, 1993).

In the last two decades, the service industry has become the dominating industry in developed countries. In the United States, three fourths of the gross national product and nine out of ten new jobs are related to services (Wharton, 1993; Zeithaml, Parasuraman, & Berry, 1990). In Hong Kong, there are less than 20% of labor force

in the manufacturing and construction industry, while nearly 80% of labor engage in the service sector or related industry (Hong Kong Government, 1998). Due to keen competition, organizations put much attention to the service quality of front-line employees because they are the bridges between the organization and general customers. In other words, their performance will inevitably affect customers' attitude towards the whole organization (Abraham, 1998; Schneider & Bowen, 1985; Zeithaml, Parasuraman, & Berry, 1990). In order to enhance and standardize the service quality of the transaction, some organizations have set display rules of emotions that prescribe the emotional expression of service providers to clients during transaction, for instance, Hochschild (1983) reported that flight attendants had been required to smile when serving clients on the plane. Hochschild (1983) coined the term "emotional labor" to refer to the emotional management of employees during service transaction.

Overview of Emotional Labor

Although studies of emotional labor have been conducted for nearly two decades, definitions of this concept still vary. In her original definition, Hochschild (1983) defined emotional labor as paid labor requiring the management of feeling to create a publicly observable facial and bodily display. Later researchers tend to define emotional labor in different way. Some have focused on situational factors (Jones &

Rohrer, 2002), while other researchers define and operationalize emotional labor on an individual basis (Mann, 1998). Recently, some researchers incorporate both situational and individual factors into the definition and operationalization of emotional labor (Brotheridge & Lee, 2002; Morris & Feldman, 1996, 1997). In the last decade, a growing number of studies of emotional labor have been conducted with a wide variety of service occupations, including flight attendants and bill collectors (Hochschild, 1983), restaurant workers (Adelmann, 1995), hospital workers (Wharton, 1993), secretaries (Wichroski, 1994), fast food workers (Leidner, 1993), cashiers (Rafaeli, 1989; Tolich, 1993), Disney employees (van Maanen & Kunda, 1989), employees in handicapped children's home, hotel business and call centers (Zaft, Vogt, Seifert, Mertini, & Isic, 1999).

Impact of Emotional Labor on Employees' Well Being

Early studies of the impact and consequences of emotional labor have emphasized its harmful effects on service providers (Pugliesi, 1999). Hochschild (1983), for instance, argued that the prolonged expression of emotional labor will negatively affect employees, and its associated negative consequences range from substance abuse, headaches, absenteeism and sexual dysfunction. Study by Morris and Feldman (1997) also hypothesized that frequency of emotional display, attentiveness to display rules, variety of emotions to be displayed and emotional dissonance will

lead to higher level of emotional exhaustion, one of the three facets of burnout proposed by Maslach and Jackson (1986). Emotional dissonance, one of the dimensions of emotional labor that had frequently been explored, is also found to negatively affect job satisfaction, although the relationship is moderated by social support (Abraham, 1998). Furthermore, emotional labor may make employees more vulnerable to physical symptoms when employee's emotional expressions on the job are not an authentic representation of his / her personal beliefs (Schaubroeck & Jones, 2000).

These studies have highlighted negative social-psychological consequences of emotional labor, both implicitly or explicitly sustaining the view that frontline service work has affective costs for workers (Wharton, 1993). The reason for these negative impacts is because most likely, effective performance of emotional labor requires that workers display emotions that they may not necessarily feel, and thus workers are at risk of experiencing various emotion-related stresses.

The uniformly negative consequences of emotional labor have been challenged by Wharton (1993). Recruiting bank and hospital employees in her study, Wharton (1993) evaluated consequences of performing emotional labor. In that study, she found that workers employed in jobs identified as having a significant amount of emotional labor were no more likely than others to experience emotional exhaustion.

Besides, emotional labor was found to have positive correlation with job satisfaction.

In other words, when the job nature requires more emotional labor, workers will

obtain a higher level of job satisfaction. However workers who perform emotional

labor under conditions of low job autonomy or high job involvement are more at risk

of emotional exhaustion than others who perform this activity. A recent study by

Brotheridge and Lee (2002) also reported that surface acting, which service providers

only alter the facial expression of emotions, positively affects depersonalization and

emotional exhaustion through perceived authenticity. However, the use of deep

acting, which service providers actively change the inner feeling in order to match the

required emotional expression, decreases job incumbents' sense of depersonalization.

Therefore, findings on the impact of emotional labor towards other organizational

behaviors have been inconclusive.

Measurement of Emotional Labor

Pugliesi (1999) argued that variation in results of prior studies of consequences

of emotional labor is likely an “artifact of variation in measurement strategies”

(Pugliesi, p.131). Thus, the confusing pattern may be due to the difference between

initial definition and subsequent operationalization of emotional labor. In her original

research, Hochschild (1983) defined emotional labor as a unidimensional construct in

terms of frequency of contact with customers. According to Brotheridge (1998), it

may be this unidimensional conceptualization that has concealed hypothesized relationships between emotional labor and negative consequences. Recent studies often define emotional labor as a multi-facet organizational variable. Morris and Feldman (1996, 1997) proposed that emotional labor consists of four dimensions, including the attentive to the display rule, frequency of interaction, variety of emotions to be displayed and emotional dissonance. Mann (1999) proposed three dimensions of emotional labor, including expectations or rules about emotional display, emotional suppression and emotional faking. Schaubroeck and Jones (2000) measured emotional labor in terms of suppression of negative emotions and expression of positive emotions. Lastly, Brotheridge and Lee (2002) also included surface and deep acting in their study.

A related problem of definition discrepancy is that researchers have used different measurement tools to measure different facets of emotional labor. Consequently, the discrepancy between the conceptualization and measurement of emotional labor renders it virtually impossible to compare findings across different studies.

When examining the existing measurement tool of emotional labor, two issues are remarkable. Firstly, most of them tend to focus only on selected dimensions of emotional labor. It is generally agreed by researchers that emotional labor is a

multi-faceted concept, but existing scales only test selected dimensions concept instead of a holistic understanding of this construct. Secondly, after reviewing the existing measurement of emotional labor, the importance of differentiating deep acting and surface acting seems to be overlooked by most researchers because only one published study tried to examine the difference between deep acting and surface acting (Brotheridge & Lee, 2002). According to Hochschild (1983), deep acting and surface acting are two different mechanisms in display rule; therefore understanding between these two concepts is important. Grandey (2000) also argued the importance of incorporating surface and deep acting into the emotional labor study, because “although dissonance is a negative state of being, surface and deep acting are processes that may have positive and negative results. This allows researchers to explain negative outcomes such as individual stress and health problems, and positive results such as customer service” (Grandey, 2000, p. 97).

As have been previous discussed, there is not a single and widely accepted definition of emotional labor. The three conceptualizations of emotional labor that have greatly influenced the field (Ashforth & Humphrey, 1993; Hochschild, 1983; Morris & Feldman, 1996) also demonstrated the confusing nature of how researchers tackle this conceptual problem (Grandey, 2000). Detailed examination of these conceptualizations of emotional labor revealed that one of the common themes is that

emotional labor involves employees' emotions management, for instance, Hochschild (1983) proposed the surface and deep acting as the mechanism to fulfill the organizational display rule while Ashforth and Humphrey (1993) also defined emotional labor an act of display appropriate emotions with the goal to engage in a form of impression management for the organization.

Apart from the psychological aspect (emotion management), situational / work related variables should also be included in understanding emotional labor. Morris and Feldman (1996, 1997) had adopted organizational expectations for employees with customers in terms of frequency of interaction, intensity of emotions expressed and variety of emotions required in interaction with clients into the operationalization of emotional labor. Definition of emotional labor should also consider these work related / situational related variables because the number of interactional (frequency) and interaction quality (duration and variety) would foster different interaction experience of service providers where previous research (Morris & Feldman, 1996) had indicated that prolong emotional labor would affect employees' well being. In other words, employees who have frequent and long interactions that require different emotions when dealing with clients may be predisposed to a higher level of emotional labor related problem that subsequently affect their well being. Grandey (2002) further postulated that emotional labor may affect various job outcomes, including

absenteeism and turnover. Thus, in order to fully understand the construct of emotional labor and its related impact, a holistic conceptualization is of utter importance. In the present study, emotional labor is defined as the requirements of the job prescribed by the organization and employees' subsequent emotional management to fulfill these rules.

Purposes of the Present Study

Review of the existing emotional labor studies suggested that there is not yet a comprehensive and standard emotional labor scale, which has been tested, in the working sample. One of the exceptions is written by Brotheridge and Lee (1998), yet, in their scale, emotional dissonance had not been included even though the importance of emotional dissonance had been well documented. This study will thus aim to develop an emotional labor scale in order to fill the gap in this area.

Questionnaire items were both drawn from currently measured constructs as well as findings from qualitative study, which would be in discussed in details in later sections. Factor analysis was used to analyze the latent factors underlying the measured constructs, which might shed light on providing a parsimonious way of measuring emotional labor. Existing emotional labor scale developed by Brotheridge and Lee (1998) was also used to correlate with the new scale in order to achieve convergent validity. The reason of choosing the emotional labor developed by

Brotheridge and Lee is that it measured both work related variables (e.g. frequency of interaction) and psychological aspect of emotional labor (e.g. Surface acting and deep acting). This existing emotional scale also demonstrated adequate levels of internal consistency (ranging from .71 to .82, see Brotheridge & Lee, 2002).

Based on previous studies, it was hypothesized that emotional labor constructs should be positively correlated with various work and psychologically related variables measured in this study, including job satisfaction, level of burnout in terms of emotional exhaustion, lack of personal accomplishment and depersonalization (Maslach & Jackson, 1986), psychological distress, absenteeism measures in terms of annual leave and sick leave taken as well as the intention to leave. High correlation between latent factors in the new emotional labor inventory will provide evidence for convergent validity of the newly developed scale.

Series of multiple regressions were adopted in order to evaluate the incremental variance accounted by the new emotional labor inventory after controlling participants' demographic characteristics, level of job satisfaction as well as measures derived from existing emotional labor scale developed by Brotheridge and Lee (1998). When the latent factors in the new emotional labor inventory provide significant explanatory power after controlling variables in regression model, this result will provide evidence of the unique contribution of the new emotional labor inventory in

measuring this multi-faceted construct.

Method

Phase I: Exploratory study

In the initial phase of item construction, open-ended questionnaires were distributed to capture perceptions of emotional labor of current job incumbents (Appendix I). Based on the interpretation of Hochschild (1983), emotional labor is equivalent to emotional management, the only difference is that “emotional management, once largely a private act, has come to be directed by work organizations, where it is now performed for a wage and under the control of others” (Wharton, 1993, p. 206). Therefore, the open-ended questionnaire adopted the term “emotional management” instead of “emotional labor” in order to facilitate better understanding of the general workforce. Three open ended questions were asked in the questionnaire, including respondents’ definition of emotional management, a critical incident of showing emotional management and the importance of demonstrating emotional management in their work¹.

Idea units were generated and concepts with highest frequency were used for scale construction. Participants in the study engaged in a wide array of occupations, with 12 of them currently worked in sales and marketing industries, nine of them were waiter / waitress in restaurants, eight of them worked in bank tellers and six of them

working in either primary and secondary school teachers. Graduate students in a local university had also been recruited in this study; all of them involved various teaching roles in the departments. Based on Hochschild (1983), all of the abovementioned occupations require the expression of emotional labor, thus, their responses could be important input for the initial item construction. There were a total of 62 completed and valid open-ended questionnaires returned for coding and processing. Table 1 presented the idea units generated from the exploratory study. After idea units had been extracted from these open-ended questionnaires, frequency of idea units had been counted; idea units with highest frequency (over half of respondents have expressed the same idea) will be considered in the ELI scale development. One of the recurrently theme appeared from these open ended questionnaires were the importance of emotional control under different situations. The importance of emotional control had not been directly measured in previous empirical research, therefore, new items were written in order to measure this construct.

Table 1. Description of Idea Units in Open-Ended Questionnaire Study

<u>Idea units</u>	<u>Frequency</u>
Emotional Control	35
Understanding Clients' Emotions	12
Maintaining Positive Emotions	8
Patience	6
Being Objective	6
Listen to Clients	5
Control Clients' Emotions	5
Display Appropriate Emotions	4
Abide to Organizational Rule	3

Based on previous research and results of exploratory study (identification of the emotional control as an potential component of emotional labor), ELI items were written by the author in the present study. Questionnaire items were written under the following dimensions: frequency, duration and variety of emotional expression during interaction with clients, emotional dissonance, display rule, employees' perception towards abiding to display rules, monitoring own and clients emotions, deep acting and surface acting. There were a total of 53 items written at this stage. The inclusion of apparently diverse dimensions into a single emotional labor scale was due to the fact that in the definition of the present study, emotional labor should encompass *both* psychological and work / situational related variables, therefore, the new ELI could simultaneously test the impact on the relationship between work / situational related factor affecting the psychological responses (i.e. emotional

dissonance) of the employees. Appendix 2 presented the questions based on different categories.

Frequency of interaction. Frequency of client contact comprises the primary focus of the emotional labor study. In her original writing, Hochschild (1983) operationalized emotional labor by frequency only. She proposed that the more frequent the contact with external clients, the more emotional labor the service provider experienced which may heighten the chance of emotional dissonance and burnout.

Duration of interaction. Duration of interaction is also considered to be another major construct of emotional labor. Morris and Feldman (1996, 1997) extended the conceptualization of Hochschild's definition of emotional labor by incorporating duration of interaction. Services delivered by frontline working staff differ significantly within the service industry. Some of them may involve very short interaction with highly standardized script, while others involves longer interaction and thus more autonomy over the transaction process. Sutton and Rafaeli (1988) and Rafaeli (1989) proposed that the planning and level of effort required for interactions of short duration are quite minimal, and this will result in fewer emotional labor. Conversely, the longer the duration of interaction, the greater the emotional labor will be required.

Variety of emotions required to be expressed. Service provider may need to deliver different emotions in specific settings. According to Morris and Feldman (1996), the greater variety of emotions service providers need to display, the greater the emotional labor of role occupants will be. In other words, when comparing job incumbents who are required to express a narrow range of emotions during transaction with clients, those job incumbents who need to demonstrate a wider range of emotions are expected to have higher emotional labor. Thus, higher variety of emotional display indicates that employees need to draw up more effort to display wide range of emotions, which in turn increase their chance of burnout.

Emotional dissonance. Emotional dissonance can be defined as the conflict between emotions genuinely felt and emotions to be displayed in organizations (Hochschild, 1983). Although there is still no consensus of whether emotional dissonance should be treated as the antecedent or the consequence of emotional labor, it is among one of the most frequently studied dimensions of emotional labor study. Studies by Morris and Feldman (1997) and Abraham (1999) aim to investigate emotional labor in terms of the emotional dissonance felt by the employee. Mann (1999) proposed that internal emotional dissonance is a necessary condition for emotional labor to exist. Previous study has documented that emotional dissonance has been positively related to emotional exhaustion but negatively correlated with job

satisfaction (Abraham, 1998; Morris & Feldman, 1997).

Display rules. Display rule is important to understand emotional labor.

Companies try to control emotional expression of their employee through imposing display rule. Display rule will eventually restrict the freedom of emotional expression of their employees during interaction with clients. Therefore items have also been written to capture whether respondents are aware the display rule of their organization.

Employees' perception of the importance of display rules. According to Hochschild (1983), organizations try to control the emotional expression of employee by display rules. As mentioned earlier, these display rules have severely bounded the freedom of emotional expression of employees. Employees' reaction to these display rules varies and depends on whether they find them important means for job success. If they believe that display rules are not important for job success, they will not easily abide to these norms. Previous research by Mann (1999) had attempted to identify expectations or rules about emotional display. The effectiveness of display rule often depends on two elements: whether the organization views the importance of their employees following the display rules, and whether the job incumbents themselves view the alignment of display rule brings them job success. Thus, when the importance of display rule is emphasized, job incumbents will be more aware of

their own emotions and emotions of customers.

Emotional management: deep acting and surface acting. Hochschild (1983)

suggested that in order to align with an organizational display rule, employees can either adopt one of the two strategies: deep acting or surface acting. Surface acting involves simulating emotions that are not actually felt, which is accomplished by careful presentation of verbal and nonverbal cues, such as facial expression, gestures, and voice tone (Ashforth & Humphrey, 1993). In other words, in order to align with the organizational display rule, employees may express the emotions that is required by the organization which they do not genuinely feel. The inauthentic sense of self may increase the chance of burnout (Brotheridge & Lee, 2002). Surface acting indicates that employees need to fake their emotions in which they may find the role over demanding, which in turn may lower their sense of job satisfaction.

By deep acting, on the other hand, employees comply with the display rule by actually feeling or experiencing emotions that one wishes to display. Feelings are actively induced, suppressed or shaped (Ashforth & Humphrey, 1993). In other words, employees successfully alter their internal emotional states and align with organizational display rule.

Monitoring of self and clients' emotions. Monitoring of self-emotions according to social situation is related to self- monitoring. According to Snyder (1974),

self-monitoring could be defined as the ability to control expressive behavior to match the expression and self-presentation of others in social situations. Monitoring emotion of oneself is important in emotional labor because service provider need to understand their own emotions in order to align their own emotional state with the company display rules. In other words, monitoring self-emotions is an essential part of service providers to deliver service to clients. Service providers also need to monitor the emotional states of their clients. Failure to monitor clients' emotions may disable some service providers from responding with proper emotions. To a large extent, emotional labor resembles social monitoring as it also states that employees alter their emotional expression in relations to clients demand. However, emotional labor goes beyond the mere explanation of changing oneself in accordance to social situation and presence of others for better impression management, it also specifies *how* the employees change themselves with different clients and display rules, for instance, employees can change their emotions based on deep acting (changing inner emotions) or surface acting (just change superficially by changing their facial expression).

Phase II: Emotional Labor Scale Questionnaire Study

In the second phase of emotional labor scale study, questionnaires with the 53 newly written items of Emotional Labor Inventory (ELI) and several criterion

variables, including job satisfaction, absenteeism, intention to leave, burnout and psychological distress were distributed to working population in Hong Kong. Data collected in this questionnaire study will be used for subsequent factor analyses and validities validation.

Participants

Job incumbents in service industries were been to this study, though various human service professionals, including nurses, social workers, occupational therapists, primary and secondary teachers comprised most of the sample population. Different data collection methods were adopted. For nurses, social workers as well as occupational therapists, questionnaires were sent to the relevant professional associations which forwarded the questionnaires to their members. For other professionals, questionnaires were directly distributed to participants. Study objectives and the use of data were written on the cover page of the questionnaire. Participants were asked to complete the attached consent form before filling in the questionnaire. Completed questionnaires were returned through standard mail. In order to increase the return rate, three participants would be randomly drawn and each of them could receive an incentive of \$500. There were totally 1800 questionnaires distributed to the participants, and 440 questionnaires were returned. The return rate was about 24%.

Instruments

Demographic variables. Participants were asked about their gender, educational attainment, age, occupation, relevant working experience, number of annual leave and sick leave that have taken in the past six months.

Job satisfaction. Overall job satisfaction of participants was measured by 7-item job satisfaction scale proposed by Caplan et al (1975). This scale measured different job aspects, including the overall work, salaries and benefits, promotion opportunities, recognition from outstanding performance, job autonomy, satisfaction with colleagues and supervisor. The scale was measured by 4-point Likert scale, with 1 as “unsatisfactory” and 4 as “satisfactory”. This scale had satisfactory internal consistency with an alpha of .89 (Sargent & Terry, 2000).

Assessment of burnout. Participants’ experiences of burnout were measured by the 22-item Maslach Burnout Inventory (MBI; Maslach & Jackson, 1986). The MBI measures three burnout dimensions, including emotional exhaustion, reduced personal accomplishment and depersonalization. Participants rated their feelings and attitudes towards their work on a 4-point scale, ranging from 1 “Never” to 4 “Always”. Higher score thus indicates higher burnout for the participants. Internal consistency of the three subscales ranged from .71 to .90 (Maslach & Jackson, 1986). Chinese version of the MBI is available. A study with Chinese samples confirmed similar

factor structure when comparing with American samples, and satisfactory internal reliabilities were reported (Tang, 1996).

Assessment of psychological distress. Participants' psychological functioning was assessed by the General Health Questionnaire (GHQ: Goldberg, 1978). The original GHQ questionnaire consists of 28 items that measure four different aspects of psychological distress, including somatic complaints, anxiety, social dysfunction and depression. The Chinese translation of the GHQ yields satisfactory internal reliability, with alpha values ranging from .87 to .93 (Chan, 1985). Participants rated their feelings and attitudes towards their work on a 4-point scale, ranging from 1 "Never" to 4 "Always". Higher score thus indicates higher burnout for the participants.

Emotional labor inventory (ELI) & Brotheridge & Lee emotional labor scale.

Participants' emotional labor were assessed by both the Emotional Labor Inventory (ELI) developed in the present study as well as by the existing scale developed by Brotheridge and Lee (1998). The newly developed ELI consists of 53 items which measured different facets of emotional labor, including frequency and duration of interaction, variety of emotions display during interaction, emotional dissonance, display rule and employees' perception to the importance of display rule, monitoring self and clients' emotions, deep acting and surface acting. All items were written in

Chinese and it first aim to measure emotional labor in Chinese working population.

Participants' emotional labor was also assessed by the emotional labor scale developed by Brotheridge and Lee (1998). This scale measured various dimensions of emotional labor, including duration of interaction, intensity, variety of emotions display, surface and deep acting. Past study reported that this scale demonstrated satisfactory internal reliabilities, with alpha ranged from .71 to .82 (Brotheridge & Lee, 2002).

Results

Exploratory Factor Analysis

In the present study, 440 completed questionnaires were returned, three of them, however, did not contain demographic information. They were thus not included for further analysis. In other words, 437 valid cases were collected for this study. The whole sample was randomly split into two sub-samples, the first sample was used to conduct the exploratory factor analysis, the remaining half of the sample was used for confirmatory factor analysis which aimed to confirm the factor structure.

The initial pool of 53 items on emotional labor was first analyzed for skewness and unbalanced distribution with the sample size of 208 participants. Among them, 36 participants were male (17.4%), while 171 were females (82.2%). Most of them had tertiary education or above (72.8%), while 26.7% of participants had either

primary or secondary schooling. Regarding the age distribution of participants, 22 participants aged between 15 to 24 years (10.7%), 81 participants aged between 25 to 34 years (39.3%), 58 participants aged between 35 to 44 years (28.2%) and 45 participants aged over 45 or above (21.8%). As aforementioned, human service professionals comprised most of the present sample, 102 participants were nurse (49.3%), 33 were social workers (15.9%), 30 were teachers (14.5%), 19 participants were occupational therapists (9.2%) and remaining participants came from different occupations, including library assistants, managers and professionals. Participants working experience ranged from less than one year to over 39 years. 70% of them had 12 years working experience. As suggested by various researchers (Clark & Watson, 1995; DeVellis, 1991; Kline, 1993), items in which responses were highly skewed were eliminated from the scale after determining that structural information would not be lost in the process. Highly unbalanced items are undesirable in scale development because when most participants answer similarly, items convey little information. These highly skewed items are also likely to correlate weakly with each other and thus fare poorly in subsequent structural analyses. In the present study, if the score of skewness is over 1, the item will be deleted. No item was deleted based on the abovementioned criterion.

Exploratory factor analyses (EFA) were performed on the 53 items, by the SPSS

10.0 computerized software program, to investigate the number of potential factors of the emotional labor construct for Chinese job incumbents. The scree plot suggested that the optimal number of components was three and all these factors had an eigenvalues above 1. With direct oblimin oblique rotations, factor solutions between two to four factors were generated and examined. In line with the scree plot suggestion, three-factors solution was the clearest model with the most interpretable components, accounting for 28.47% of variance of emotional labor score. Appendix 3 presents the preliminary exploratory factor analysis results

For conventional scale development practice, item could be included into a factor when the factor loading exceed .35 (Floyd & Widaman, 1995). However, there is no rule of thumb for setting the criterion of deciding the level of cross loading among items. Based on the selection criteria proposed by Floyd and Widaman (1995), Items were included into the emotional labor inventory (ELI) when the item fulfilled two criteria: with rotated factor loadings greater than .35 and rotated loadings to other factor (cross loading) is smaller than .25.

On the basis of the above criteria, the ELI consisted of 27 items and they were grouped under three factors. The first factor comprised of 12 items and was termed “Emotional Sensitivity and Control”. The second factor had eight items and it was termed “Emotional Dissonance”, the last factor consists of seven items and was

termed “Emotional Labor Work Conditions”. Internal consistency reliabilities (alpha) were computed for the three factors. Appendix 4 presents the Item-total correlation of the three ELI scales. Items with negative item-total correlations were deleted. Based on this criterion, two items were deleted from Emotional Dissonance scale and another two items were deleted from the Emotional Labor Work Conditions scale. Satisfactory alpha were obtained after deletion of items, the standardized item alpha was .75 for the Emotional Sensitivity and Control scale (twelve-item), .70 for the emotional Dissonance scale (six-item) and .71 for the Emotional Labor Work Conditions scale (five-item).

“Emotional Sensitivity and Control” represents the ability of the job incumbents in understanding clients’ emotions and the ability to control their own emotions. According to Davies, Stankov and Roberts (1998) article, the authors had showed that emotional sensitivity and subscale in emotional control has been found to be loaded onto a same latent factor (emotional awareness). Therefore, the present finding resembled previous study that emotional sensitivity and emotional control should belong to a single factor instead of being treated in two separate factors. Examples of the Emotional Sensitivity and Control included “in order to satisfy organization’s requirements, I would deliberately express the required emotions” and “the job requires me to wear a smile, so I often make myself happy”. Items included in this

new dimension derived mostly from various scales, including deep acting, emotional control and monitoring of self and clients' emotions. In other words, this scale incorporated items which measured the internal emotions and emotional states of participants. This scale explains 16.39 percent of variance of dataset.

The second factor was labeled "Emotional Dissonance", which reflected the emotional incongruence between the felt and expressed emotions. Sample items included "most of the work time, my inner feeling and the expressed emotions is not the same" and "when dealing with clients, my expressed emotions and my real feeling is not the same". The final scale of Emotional Dissonance consists of six items and it explains 11.70 percent of variance.

The last factor extracted was labeled "Emotional Labor Work Conditions" which represented the job requirements that required emotional behaviors of job incumbents. Items included in this scale derived mostly from frequency and duration of interaction, variety of emotions required to be expressed in their job and display rule. Thus, this scale incorporated items which tended to measure work characteristics. Sample items of this scale included "Most of the time I have to deal with clients" and "Frequently entertaining clients is my prime duty". The final Emotional Labor Work Conditions scale consists of 5 items and it accounts for 9.71 percent of variance. The three factor ELI could totally explain 37.8 percent of variance of the dataset. Table 2

presents the factor loadings of the final ELI scale.

Table 2. Factor Analysis Results (N = 208)

Item description	1	2	3
I would try to change my genuine feeling in order to fulfill the organizational rule and clients' expectation	0.615		
I would alter my genuine feeling in order to fulfill the organizational requirement	0.598		
The job requires staff wearing a smile, so, I would try to make myself happy	0.596		
I always display organizational desired emotions	0.564		
It is necessary to change my emotions when dealing with clients	0.551		
Even though I feel bad, I would try to work light-heartedly	0.473		
I always imagine something happy which enable me to deal with clients in positive mood	0.452		
I need to demonstrate different internal emotions in order to satisfy different clients' need	0.446		
The organization had clear guidelines of how to deal with clients	0.436		
When dealing with clients, the organization had clear guidelines of how I should express my emotions	0.431		
I always pay attention to what kind of emotions that I am showing to clients	0.399		
When clients is dismay, I would treat them more empathetically in order to make them feel better	0.355		
Most of the work time, my external emotional expression differs with my genuine internal feeling		0.651	
In order to satisfy organizational need, I would deliberately express the desired emotions		0.651	
When dealing with clients, my expressed emotions differ from my genuine feeling		0.563	
Sometimes, the organizational desired emotional expression differed from my true feeling		0.536	
My emotional expression is solely the requirement from the organization, it is not my true feeling		0.502	
There is some rule of thumb method of dealing clients		0.350	
Most of the time, I need to deal with clients			-0.669
Expressing friendliness and courtesy is important in my job			-0.628
Dealing with clients comprised most of my work			-0.618
I always need to take care of clients			-0.583
I would repress my anger when I am dealing with my clients			-0.386
Variance explained	16.39%	11.70%	9.71%

Emotional Sensitivity and Control was positively and moderately correlated with Emotional Dissonance ($r = .29, p < .01$) and Emotional Labor Work Conditions ($r = .17, p < .01$), but there was no significant correlation between Emotional Labor Work Conditions and Emotional Dissonance ($r = .04, p > .05$). Two of the intercorrelations of the latent factors in ELI (correlations between Emotional Sensitivity and Control & Emotional Dissonance as well as Emotional Sensitivity and Control & Emotional Labor Work Conditions) were found significant ($r = .29$ & $.17$ respectively, both significant at $p < .01$ level). However, Emotional Dissonance and Emotional Labor Work Conditions were not significantly correlated ($r = .04, p > .05$). It is argued that emotional labor comprised of three distinctive facets which may not directly associate with dimensions even under the same construct. The pattern resembles the 3-factor burnout construct (MBI, Maslach and Jackson, 1986) as emotional exhaustion correlates significantly with depersonalization and lack of personal accomplishment, yet there was robust finding that depersonalization and lack of personal accomplishment was not significantly correlate.

Joint Factor Analysis

Joint factor analysis of the ELI and emotional labor scale by Brotheridge and Lee was conducted in order to examine the validity of the newly derived scale. Totally 10 factors were extracted in the initial factor analysis (all with eigenvalues > 1),

accounting for 61.46 percent of variances. However, in order to make direct comparison between the 3 factor solution for the ELI, another set of factor analysis has been conducted and has been fixed into three factor solution. Table 3 presented the joint factor analysis results.

The three factor solution in this joint factor analysis accounted for 32.64 percent of variances. Generally speaking, factor extracted from the joint factor analysis of ELI and Brotheridge and Lee emotional labor scale (1998) were in line with the definition and understanding of emotional labor in this study as theoretically related factor were found to load on the same rotated factor. For instance, deep acting items of Brotheridge and Lee scale were found to load on Emotional Sensitivity and Control dimension of ELI. This finding fit the understanding of emotional labor as deep acting is the mechanism which require high level of emotional control over their emotions (i.e. by evoking inner feeling to fulfill the organizational display rules). This factor accounted for 14.25 percent of variance.

Items of surface acting in Brotheridge and Lee scale were found to load on the Emotional Dissonance of ELI. This fit the linkage between of emotional dissonance and surface acting: when employee needs to fulfill the organizational needs when he or she does not actually feel, they may adopt surface acting which create the incongruence of true feeling and expressed emotions. This factor accounted for

11.86 percent of variance.

Work related variables in the Brotheridge and Lee scale, including variety of emotions displayed, intensity of emotions and duration of interaction comprised of another factor with only one item in the new ELI included. The only ELI item included was related to variety of emotions displayed. This factor accounted for

6.53 percent of total variance.

Table 3. Joint Factor Analysis Results (N = 437)

	1	2	3
<i>Really try to feel the emotions I have to show as part of my job</i>	.566		.306
The job requires me wearing a smile, so I would try to make myself happy	.530		
<i>Try to actually experience the emotions that must show</i>	.527		.319
<i>A typical interaction I have with a customer takes about __min</i>	.499		.385
I deal with clients most of the time	.497		
Expressing friendliness and courtesy is important in my work	.487		
Even though I feel bad, I would try to work light-hearted	.479		
It is necessary to change oneself's emotions when dealing with clients	.479		
Dealing with clients comprised the most of my job	.478		
<i>Make an effort to actually feel that emotions that I need to display to others</i>	.477		.289
I always express organizational desired emotions	.462	.443	
I always think of something happy which enables me to serve clients happily	.440		
When customers were in dismay, I would treat them more empathetically in order to make them feel better	.420		
Always need to deal with clients	.387		
I always aware of how people perceive my feeling expression	.337		
I would repress my anger when dealing with clients	.321		
In order to satisfy organizational need, I would deliberately express certain emotions		.678	
<i>Hide my true feelings about a situation</i>		.645	
My emotional expression is solely the organizational requirement, it is not my genuine feeling		.635	
Pretend to have emotions that I don't really have		.621	
Most of the work time, my external emotional expression is different from my genuine feeling		.579	
Sometimes, the organizational required emotional expression differs from my genuine feeling		.549	
I would try to change my genuine feeling in order to fulfill the clients' satisfaction	.383	.536	
<i>Resist expressing my true feelings</i>		.523	
I would alter my genuine feeling in order to fulfill the organizational requirement	.415	.522	
When dealing with clients, my expressed emotions differs from my genuine feelings		.492	
When dealing with clients, the organization have clear guidance of how I should express my emotions		.357	
The society should have some taken for granted rule to handle clients, like policemen should be sober while salesperson should always wear a smile		.300	
When dealing with clients, organization has clear guide lines of how to deal with clients		.293	
<i>Express many different emotions</i>			.819
<i>Display many different kinds of emotions</i>			.813
<i>Express intense emotions</i>			.746
<i>Show some strong emotions</i>			.742
<i>Display many different emotion when interacting with clients</i>			.620
I need to demonstrate different internal emotions in order to satisfy different customers need	.296		.328
Variance explained	14.25%	11.86%	6.53%

*Brotheridge and Lee scale (1998) in italic

Confirmatory Factor Analysis and Convergent Validity Study

A separate sample with 229 job incumbents were used for cross validation of factor structure derived from the exploratory factor analysis. Slightly more than half of the respondents in this stage (52.8%) were nurse, 16.2% were social workers, 11.4% were occupational therapists, and the remaining participants came from various occupations, including teachers, managers, clerks and librarian assistants. Nearly 78% of participants had tertiary education background, while the remaining 22% of participants had secondary educational level. 80% of participants aged between 15 to 44 years while the remaining 20% of participants aged 45 years or above. Regarding the gender of participants, female participants had outnumbered their male counterparts as 83% of participants were female. The 23-item emotional labor inventory was administered in this present study.

Using EQS 5.7 and employing maximum likelihood estimation procedures with covariance matrix, confirmatory factor analysis (CFA) was used to evaluate the fit of both a the measurement model proposed by the exploratory factor analysis and a single factor model which served as baseline comparison model. Several fit indices were used to separately evaluate and compare across the CFA model, including the chi-square test, comparative fit index (CFI), Lisrel GFI fit index and Lisrel AGFI fit index.

Single factor model was tested by the CFA first and served as the baseline reference. Based on chi-square test ($\chi^2 = 828.97$, [230], $p < .001$), the model did not fit of data well. Other goodness-of-fitness indices suggested that the model fit was unsatisfactory (CFI = .46, GFI = .72, AGFI = .66). The three- factor model proposed by the EFA was eventually examined by CFA. Although it represented a significant improvement in fit over the one-factor model, this three-factor measurement solution was still not adequate as the chi-square value was significant ($\chi^2 = 526.23$ [227], $p < .001$). The goodness-of-fit indices also suggested that the factor structure was not satisfactory these indices ranged from .72 (CFI) to .82 (GFI). Potential factors related to poor model fitting will be further elaborated in discussion. With the confirmatory factor analysis results, the 23 item ELS was designated as the final scale for subsequent analyses.

Concurrent Validity

In order to establish convergent validity of the ELI, the newly developed scale was used to correlate with an existing emotional labor scale developed by Brotheridge and Lee (1998) as well as predicting various variables, including absenteeism, intention to leave, job satisfaction, burnout and psychological distress. These analyses were based on the full sample size ($n = 437$) collected in the questionnaire study.

Existing emotional labor developed by Brotheridge and Lee (1998) were used to correlate with the newly developed items in order to establish the concurrent validity. Several dimensions had been measured in that scale, including duration, intensity, variety, surface acting and deep acting. New variables had been computed from the Brotheridge and Lee emotional labor scale for comparison with the newly derived factors in ELI. Brotheridge and Lee conducted factor analysis with oblimin rotation to identify the factor structure of the emotional labor scale. Factor analysis result suggested a four-factor solution, which resembled the original factor structure, proposed by these authors, these latent factors were variety of emotional display, surface and deep acting as well as the intensity of emotion display. These scales explained 72.2% of variance of the data set. Pearson correlation was then computed with the four factors of Brotheridge and Lee's emotional labor scale with the ELI.

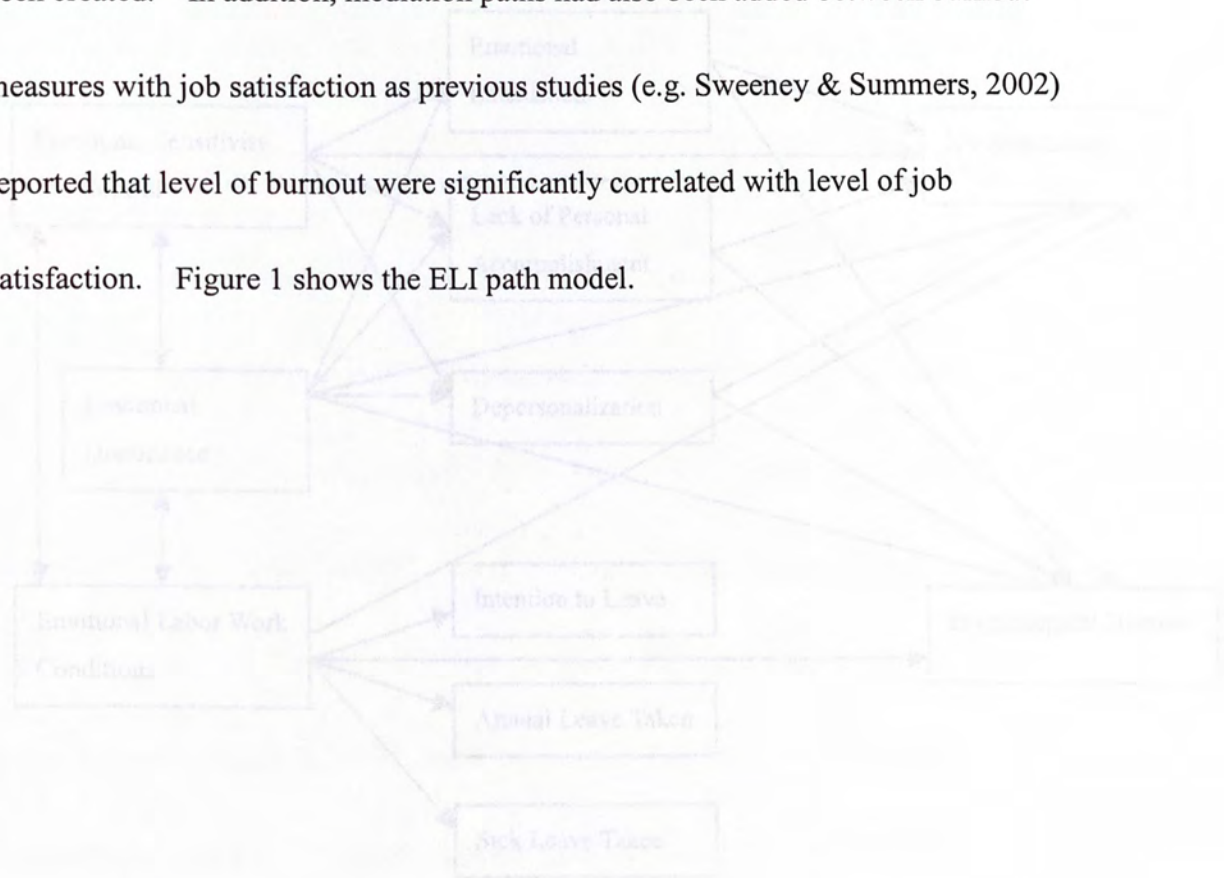
Nearly all subscales of ELI correlated significantly with the existing emotional labor scale by Brotheridge and Lee (1998), although the correlations coefficients are relative small. Emotional Sensitivity and Control correlated with all emotional labor factors in the scale by Brotheridge and Lee, it significantly correlated with variety of emotions ($r = .18, p < .01$), deep acting ($r = .33, p < .01$), emotion intensity ($r = .13, p < .01$) and surface acting ($r = .11, p < .05$). Emotional Dissonance correlated significantly with surface acting ($r = .49, p < .01$) and intensity of emotions ($r = -.13,$

$p < .01$). Emotional Labor Work Conditions also correlated significantly with variety of emotion display ($r = .14, p < .01$), deep acting ($r = .18, p < .01$) and intensity ($r = .12, p < .05$).

Testing of Nomological Network with ELI and Criterion Variables

In order to examine the intercorrelations and possible interactions among ELI factors with criterion variables in this study, a theoretical nomological network had been established in order to test these associations simultaneously. The hypothetical path model was tested by EQS 5.7 statistical package. Based on previous studies (Grandey, 2002; Pugliesi, 1999), it was hypothesized that Emotional Sensitivity and Control and Emotional Dissonance could significantly predict burnout, psychological distress as well as job satisfaction of participants. Generally speaking, a higher level of Emotional Control and Emotional Dissonance and Emotional Dissonance should result in a higher level of both burnout and psychological distress and a lower level of job satisfaction. Emotional Labor Work Conditions, on the other hand, should predict work related variables, including intention to leave, absenteeism as well as job satisfaction of participants. A higher level of Emotional Labor Work Conditions should increase the likelihood of intention to leave, absenteeism but decrease the level of job satisfaction. As suggested by previous studies (e.g. Tang, Au, Schwarzer and Schmitz, 2001), the level of psychological distress should be mediated by burnout,

therefore, mediation paths between burnout measures and psychological distress had been created. In addition, mediation paths had also been added between burnout measures with job satisfaction as previous studies (e.g. Sweeney & Summers, 2002) reported that level of burnout were significantly correlated with level of job satisfaction. Figure 1 shows the ELI path model.

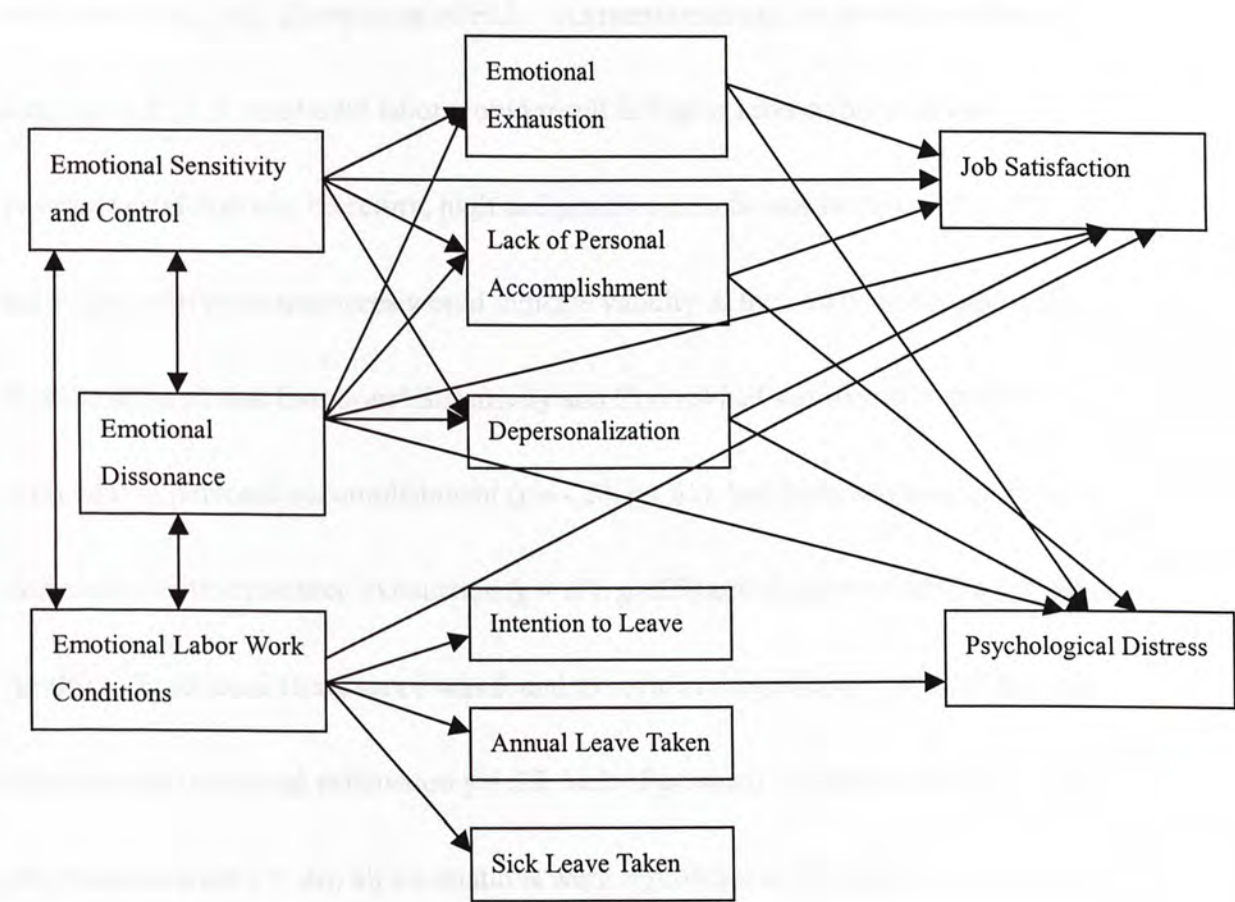


Criterion Validity

In order to establish the convergent validity of the ELS, correlations between work and psychological related variables had been conducted between the ELS and other variables. The correlation between ELS and scales suggested criterion validity. Table 2 presents the correlations analyses between ELS and different measures of work and psychological variables.

Burnout and psychological distress. The criterion validity of the ELS was tested by correlating it with the personal accomplishment (five items), and depersonalization (eight items) subscales of the Maslach Burnout Inventory (Maslach & Jackson, 1986) and psychological

Figure 1. Nomological Network of ELI with Criterion Variables



Criterion Validity

In order to establish the convergent validity of the ELI, correlation with several work and psychological related variables had been conducted in this study. Higher correlation between ELI and scales suggested criterion validity. Table 4 summarizes correlations analyses between ELI and different measures.

Burnout and psychological distress. The emotional exhaustion (nine items), personal accomplishment (five items), and depersonalization (eight items) subscales of the Maslach Burnout Inventory (Maslach & Jackson, 1986) and psychological

distress measured by General Health Questionnaire (GHQ: Goldberg & Hillier, 1979) were correlated with dimensions of ELI. As mentioned earlier, growing evidence suggested, higher emotional labor would result in higher level of burnout and psychological distress, therefore, high and positive correlations between ELI subscales with these measures would indicate validity of the newly developed scale. Results showed that Emotional Sensitivity and Control had significant correlation with lack of personal accomplishment ($r = -.20, p < .01$), but there was no significant correlation with emotional exhaustion ($r = .04, p > .05$) and depersonalization ($r = .08, p > .05$). Emotional Dissonance was found to correlate significantly with all burnout dimensions (emotional exhaustion $r = .35$, lack of personal accomplishment, $r = .31$; depersonalization $r = .46$; all correlations were significant at .01 level). Emotional Labor Work Conditions were significantly correlated with lack of personal accomplishment ($r = -.21, p < .01$), but this construct did not significantly correlate with emotional exhaustion ($r = .02, p < .05$) and depersonalization ($r = .05, p > .05$).

Psychological distress was significantly correlated with Emotional Dissonance ($r = .32, p < .01$) and Emotional Labor Work Conditions ($r = -.11, p > .05$). However, no significant correlation was found between psychological distress and Emotional Sensitivity and Control ($r = -.04, p > .05$).

Absenteeism and intention to leave. Although there was no previous study which

directly tackled the relationship between absenteeism and emotional labor, it was hypothesized that higher level of emotional labor would correlate significantly with sick leave and annual leave taken in the past six months because prolonged emotional labor might affect their psychological well being or heighten their job satisfaction and burnout, and thus setting the stage of absenteeism. When examining the correlation matrix, Emotional Sensitivity and Control and Emotional Dissonance did not correlate with absenteeism measures (annual leave and sick leave taken) as well as intention to leave measures (intention to stay for 0.5, 1, 5 and 10 years). The only exception was that Emotional Sensitivity and Control correlated with intention to stay for 5 years ($r = .11, p < .05$). In general, Emotional Sensitivity and Control and Emotional Dissonance did not correlate with the absenteeism measures as hypothesized.

However, Emotional Labor Work Conditions were found to correlate with almost all absenteeism and intention to leave measures. Emotional Labor Work Conditions correlated with number of annual leave taken ($r = .13, p < .01$), and number of sick leave taken ($r = .12, p < .05$). This subscale correlated with intention to leave from .5 year to 1 year ($r = .18$ and $.14$, for .5 year and 1 year, respectively, $p < .01$) and it correlated with intention to leave for 5 years ($r = .10, p < .05$). There was no significant correlation between Emotional Labor Work Conditions and intention to leave for 10 years ($r = .04, p > .05$).

Table 4. Descriptive Statistics and Results of Correlation Analyses (N=437)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
<u>Demographic Variables</u>																		
1. Gender																		
2. Educational Level	-.08																	
3. Age	-.08	-.12*																
4. Working Experience	-.04	-.20*	.66**															
<u>Absenteeism Measures</u>																		
5. Annual Leave Taken	.13**	-.08	.15**	.31**														
6. Sick Leave Taken	-.00	-.07	-.11*	-.04	.13*													
<u>Expected Service Duration</u>																		
7 .5 year	-.07	-.13**	.12*	.12*	.19**	.07												
8. 1 year	-.11	-.16**	.10*	.08	.18**	.04	.89**											
9. 5 years	-.02	-.21**	.05	.12*	.16**	.08	.60**	.67**										
10 10 years	-.01	-.20**	-.01	.09	.18**	.04	.49**	.54**	.80**									
<u>Psychological Health</u>																		
11. Emotional Exhaustion	.10*	.07	-.03	.01	.16**	.14**	.01	-.01	-.03	-.03								
12. Lack of Personal Accomplishment	-.08	-.02	-.24**	-.19**	-.07	-.07	-.12*	-.10*	-.03	-.00	.30**							
13. Depersonalization	.00	-.05	-.15**	-.05	.10*	.09	.01	.03	.05	.08	.65**	.40**						
14. Psychological Distress	-.02	.04	-.20**	-.15**	.05	.11*	-.13**	-.13*	-.08	-.05	.60**	.62**	.52**					
<u>Job Outcome</u>																		
15. Job Satisfaction	-.05	-.07	.16**	.07	-.08	-.19**	.07	.10*	.09	.07	-.50**	-.35**	-.38**	-.44**				
<u>Emotional Labor Indices</u>																		
16. Emotional Sensitivity and Control	.08	-.13	.08	.12*	.00	-.02	.05	.08	.11*	.06	.04	-.20**	.08	-.04	.14**			
17. Emotional Dissonance	-.04	.01	-.14**	-.15**	.04	.08	.04	.02	.05	.06	.35**	.31**	.46**	.32**	-.33**	.29**		
18. Work Conditions	.12	-.03	-.11*	-.11*	.13**	.12*	.18**	.14**	.10*	.04	.02	-.21**	-.05	-.11*	.02	.17**	.04	
Means	--	--	--	9.61	9.95	2.04	3.48	3.42	2.95	2.69	23.65	25.29	10.28	2.05	2.92	2.76	2.59	3.31
Standard Deviations	--	--	--	7.93	8.91	4.30	.70	.72	.86	.93	5.18	3.46	2.85	.47	.61	.30	.39	.40
Internal Reliability Alpha	--	--	--	--	--	--	--	--	--	--	.86	.81	.72	.87	.80	.75	.70	.71

Note: **p<.01 (two-tailed) *p<.05 (two-tailed)

Generally speaking, dimensions of ELI could significantly predict the criterion

variables in predicted direction, except that Emotional Sensitivity and Control was not

significant in predicting emotional exhaustion and depersonalization as well as the failure of depersonalization in predicting job satisfaction and psychological distress. Surprisingly, Emotional Dissonance was also found to be insignificant in predicting psychological distress in the path model.

Path Model Testing of Nomological Network

Chi square suggested the proposed model did not represent a good fit of the data ($\chi^2 = 296.91$, $df = 32$). Goodness of fit indices also suggested that the model is not satisfactory (NFI = .73, CFI = .75). However, predicted mediation effect between emotional exhaustion as well as lack of personal accomplishment with psychological distress was significant ($r = -.05$ & $.03$, respectively, $z < 1.96$). The expected mediation between emotional exhaustion as well as lack of personal accomplishment with job satisfaction was also supported ($r = .04$ & $.07$ respectively, $z < 1.96$). In order to further assess the explanatory power of the ELI in predicting criterion variables in this study, series of hierarchical regressions had been conducted in predicting individual criterion variables.

Regression analyses

In order to establish the predictive validity of the ELI, a series of hierarchical regression analyses were performed to determine the contribution of the ELI items in predicting various work related variables, including absenteeism and intention to leave measures, burnout scales, psychological distress and job satisfaction. Three blocks of factors were entered into the regression analyses with a priori determined sequence. Demographic information including gender, age, educational level and two job related variables, working experience and job satisfaction, were entered as Block 1. Four subscales of emotional labor scale developed by Brotheridge and Lee (1998) were entered into Block 2. Newly developed factors of the ELI, including the Emotional Sensitivity and Control, Emotional Dissonance and Emotional Labor Work Conditions were entered into the final block of the regression analyses. If the ELI dimensions contributed significant explanatory power after controlling both demographic variables, job satisfaction as well as the four subscales in the Brotheridge and Lee emotional labor scale, it then provided evidence of the incremental predictive validity of the ELI.

Absenteeism. Table 5 summarized results of regression analyses for annual leave taken, sick leave taken for the last six months of participants. The three blocks of demographic and work related factors and subscales of Brotheridge and Lee

emotional labor scale and the three subscales of emotional labor inventory accounted for 15.7% and 8.3% of variance of annual leave and sick leave taken, respectively.

The subscales of ELI could not significantly contribute additional explanatory power into the regression models. Beta values of the final models indicated that gender,

working experience and Emotional Labor Work Conditions could best predict the annual leave taken, while level of job satisfaction, educational level and Emotional Labor Work Conditions could best predict the sick leave taken of respondents in this

study.

Model 1		.14	.76	.07	1.79
Gender	.14*			-.05	
Educational Level	-.00			-.10	
Age	-.03			-.10	
Working Experience	.35**			.02	
Job Satisfaction	-.08			-.22**	
Variety of Emotional Display	.03			.10	
Surface Acting	-.08			-.02	
Deep Acting	-.00			.05	
Emotional Intensity	.00			.02	
Model 2		.16	2.31	.08	
Gender	.14*			-.05	
Educational Level	-.01			-.10	
Age	-.03			-.08	
Working Experience	.35**			.01	
Job Satisfaction	-.08			-.21	
Variety of Emotional Display	.03			.10	
Surface Acting	-.08			-.02	
Deep Acting	-.00			.04	
Emotional Intensity	-.06			.02	
Emotional Sensitivity and Control	-.02			-.01	
Emotional Dissonance	.01			.00	
Emotional Labor Work Conditions	.12*			.07*	

Notes: **p<.01 (two-tailed) *p<.05 (two-tailed)

Intention to Leave. The four intention to leave indicators were used to create the overall intention to leave index. Table 2 summarizes the

Table 5. Results of Hierarchical Regression Analyses for Absenteeism (N=437)

	Absenteeism					
	Annual Leave Taken			Sick Leave Taken		
	Beta	R ²	F	Beta	R ²	F
<u>Model 1</u>		.13	14.78**		.02	2.06
Gender	.14*			-.03		
Education Level	.00			-.08		
Age	-.08			-.14*		
Working Experience	.38**			.03		
<u>Model 2</u>		.14	4.37*		.05	14.19**
Gender	.14*			-.04		
Education Level	-.01			-.09		
Age	-.06			-.11		
Working Experience	.37**			.02		
Job Satisfaction	-.10*			-.19**		
<u>Model 3</u>		.14	.78		.07	1.71
Gender	.14*			-.05		
Education Level	-.00			-.10		
Age	-.05			-.10		
Working Experience	.36**			.02		
Job Satisfaction	-.08			-.22**		
Variety of Emotion Display	.03			.10		
Surface Acting	.08			-.03		
Deep Acting	-.00			.05		
Emotion Intensity	.00			.02		
<u>Model 4</u>		.16	2.31		.08	1.77
Gender	.14*			-.05		
Education Level	-.01			-.10		
Age	-.03			-.08		
Working Experience	.35**			.01		
Job Satisfaction	-.08			-.21		
Variety of Emotion Display	.03			.10		
Surface Acting	.08			-.03		
Deep Acting	-.00			.06		
Emotion Intensity	-.00			.02		
Emotional Sensitivity and Control	-.07			-.07		
Emotional Dissonance	.01			.03		
Emotional Labor Work Conditions	.12*			.10*		

Notes: **p<.01 (two-tailed) *p<.05 (two-tailed)

Intention to leave. The four intention to leave indices were combined to form the overall intention to leave index. Table 6 summarized the regression results.

Using the same set of predictors, the final regression model could account for 8.2% of

variance for the overall intention to leave index, and both blocks of predictors were

found to be significant. Beta score suggested that participants' educational level and

Emotional Labor Work Conditions were best predictors in predicting job incumbents'

intention to leave in this study.

Overall Intention to Leave		
Model 1	.05	3.32**
Model 2	.06	2.85
Gender	-.07	
Education Level	.18**	
Age	-.04	
Working Experience	.10	
Job Satisfaction	.05	
Model 3	.06	.72
Gender	-.07	
Education Level	.18**	
Age	-.04	
Working Experience	.10	
Job Satisfaction	.05	
Variety of Emotion Display	.02	
Surface Acting	.05	
Deep Acting	-.04	
Emotion Intensity	.06	
Model 4	.08	3.18*
Gender	-.07	
Education Level	.17**	
Age	-.03	
Working Experience	.09	
Job Satisfaction	.10	
Variety of Emotion Display	.01	
Surface Acting	.04	
Deep Acting	-.04	
Emotion Intensity	.06	
Emotional Sensitivity and Control	.01	
Emotional Disregard	.08	
Emotional Labor Work	.12*	
Control Notes		

Notes: **p<.01 (two-tailed) *p<.05 (two-tailed)

Burnout Measures. Table 7 summarizes results of regression analyses for the

various burnout scales, including emotional exhaustion, depersonalization and lack of

Table 6. Results of Hierarchical Regression Analyses for Intention to Leave (N=437)

	Overall Intention to Leave		
	Beta	R ²	F
<u>Model 1</u>		.05	5.32**
Gender	-.06		
Education Level	-.18**		
Age	-.03		
Working Experience	.10		
<u>Model 2</u>		.06	2.65
Gender	-.07		
Education Level	-.18**		
Age	-.04		
Working Experience	.10		
Job Satisfaction	.08		
<u>Model 3</u>		.06	.72
Gender	-.07		
Education Level	-.18**		
Age	-.04		
Working Experience	.10		
Job Satisfaction	.08		
Variety of Emotion Display	.02		
Surface Acting	.05		
Deep Acting	-.01		
Emotion Intensity	.06		
<u>Model 4</u>		.08	3.18*
Gender	-.07		
Education Level	-.17**		
Age	-.01		
Working Experience	.09		
Job Satisfaction	.10		
Variety of Emotion Display	.01		
Surface Acting	.01		
Deep Acting	-.04		
Emotion Intensity	.06		
Emotional Sensitivity and Control	.01		
Emotional Dissonance	.08		
Emotional Labor Work Conditions	.13*		

Notes: **p<.01 (two-tailed) *p<.05 (two-tailed)

Burnout Measures. Table 7 summarizes results of regression analyses for various burnout scales, including emotional exhaustion, depersonalization and lack of

personal accomplishment. The three blocks of predictors accounted for 36.2%, 32%, 34.4% of variance for emotional exhaustion, depersonalization and lack of personal accomplishment, respectively. Beta values of the final models indicated that emotional exhaustion was best predicted by respondents' gender, level of job satisfaction, variety of emotions and surface acting in Brotheridge and Lee emotional labor scale as well as Emotional Dissonance in the ELI. Lack of personal accomplishment was best predicted by age of respondents, level of job satisfaction, variety of emotion display, deep and surface acting scales in Brotheridge and Lee scale as well as all subscales in ELI. Depersonalization was best predicted by level of job satisfaction, variety of emotion display, Emotional Dissonance and Emotional Labor Work Conditions of the ELI.

Gender	.36	.107
Education Level	.24	.12
Age	.11	.087
Workload	.27	.10
Job Satisfaction	-.18**	-.09*
Variety of Emotion Display	.12*	.13**
Variety Acting	.17**	.06
Deep Acting	.01	-.13*
Surface Acting	.04	.01
Emotional Dissonance	.14*	.09
Control		
Emotional Exhaustion	.12*	.11**
Work Conditions	.04	.06

Note: *p<.05, **p<.01, ***p<.001

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The final model explained 36.2% of variance in emotional exhaustion

Table 7. Results of Hierarchical Regression Analyses for Burnout (N=437)

	Burnout Dimensions								
	Emotional Exhaustion			Lack of Personal Accomplishment			Depersonalization		
	Beta	R ²	F	Beta	R ²	F	Beta	R ²	F
<u>Model 1</u>		.01	1.20		.08	8.40**		.03	3.27*
Gender	.10*			-.12*			-.04		
Education Level	.01			.07			-.08		
Age	-.02			-.22*			-.19*		
Working Experience	.03			.06			.05		
<u>Model 2</u>		.25	134.13**		.19	56.81**		.16	63.99**
Gender	.08			-.14*			-.06		
Education Level	.02			-.07			-.10*		
Age	.07			-.16*			-.13*		
Working Experience	.00			-.08			.03		
Job Satisfaction	-.50**			-.34**			.03		
							-.37**		
<u>Model 3</u>		.35	15.38**		.30	15.61**		.25	12.48**
Gender	.07			-.10*			-.04		
Education Level	.02			-.05			-.08		
Age	.10			-.17*			-.10		
Working Experience	-.02			-.07			.00		
Job Satisfaction	-.46**			-.24**			-.29**		
Variety of Emotion Display	.10*			-.19**			-.02		
Surface Acting	.28**			.17**			.32**		
Deep Acting	.02			-.18**			-.04		
Emotion Intensity	.07			-.04			.05		
<u>Model 4</u>		.36	2.41		.34	10.12**		.32	13.08**
Gender	.08			-.07			-.03		
Education Level	.02			-.07			-.08		
Age	.11			-.18*			-.10		
Working Experience	-.02			-.05			.01		
Job Satisfaction	-.44**			-.19**			-.24**		
Variety of Emotion Display	.10*			-.17**			-.02		
Surface Acting	.23**			.10*			.19**		
Deep Acting	.03			-.12*			-.03		
Emotion Intensity	.08			-.01			.07		
Emotional Sensitivity and Control	-.01			-.10*			.05		
Emotional Dissonance	.13*			.19**			.26**		
Work Conditions	-.04			-.17**			-.12*		

Notes: **p<.01 (two-tailed) *p<.05 (two-tailed)

Psychological Distress. Table 8 summarizes results of regression analysis.

The final model explained 28.5% of variance of participants' level of psychological

distress. Beta scores indicated that psychological distress was best predicted by level of job satisfaction, surface acting in Brotheridge and Lee scale, Emotional Dissonance and Emotional Labor Work Conditions.

Model 1		21	3.17*
Gender	-.03		
Education Level	-.03		
Age	-.06		
Working Experience	-.08		
Job Satisfaction	-.42**		
Model 2		26	7.43**
Gender	-.13		
Education Level	-.04		
Age	-.05		
Working Experience	-.09		
Job Satisfaction	-.37**		
Variety of Handling Wishes	.00		
Surface Acting	.13**		
Deep Acting	-.07		
Emotion Intensity	.08		
Model 3		39	4.53*
Gender	-.01		
Education Level	-.04		
Age	-.05		
Working Experience	-.08		
Job Satisfaction	-.35**		
Variety of Emotions Display	.01		
Surface Acting	.18**		
Deep Acting	-.06		
Emotion Intensity	.09		
Emotional Sensitivity and Control	-.02		
Emotional Dissonance	-.12*		
Emotional Labor Work Conditions	-.13*		

Notes: **p<.01 (two-tailed); *p<.05 (two-tailed)

Job Satisfaction. Table 2 summarizes results of regression analysis on job satisfaction of respondents. The three blocks of demographic and working experience, Brotheridge and Lee emotional labor scale as well as the ELL derived a

Table 8. Results of Hierarchical Regression Analyses for Psychological Distress (N=437)

	Overall Intention to Leave		
	Beta	R ²	F
<u>Model 1</u>		.03	3.17*
Gender	-.01		
Education Level	-.03		
Age	-.13*		
Working Experience	-.06		
<u>Model 2</u>		.21	93.14**
Gender	-.03		
Education Level	-.05		
Age	-.06		
Working Experience	-.08		
Job Satisfaction	-.43**		
<u>Model 3</u>		.26	7.41**
Gender	-.13		
Education Level	-.04		
Age	-.05		
Working Experience	-.09		
Job Satisfaction	-.37**		
Variety of Emotion Display	.00		
Surface Acting	.23**		
Deep Acting	-.07		
Emotion Intensity	.08		
<u>Model 4</u>		.29	4.53*
Gender	-.01		
Education Level	-.04		
Age	-.06		
Working Experience	-.08		
Job Satisfaction	-.35**		
Variety of Emotion Display	.01		
Surface Acting	.18**		
Deep Acting	-.06		
Emotion Intensity	.09		
Emotional Sensitivity and Control	.02		
Emotional Dissonance	.12*		
Emotional Labor Work Conditions	-.13*		

Notes: **p<.01 (two-tailed) *p<.05 (two-tailed)

Job Satisfaction. Table 9 summarizes results of regression analyses for job satisfaction of respondents. The three blocks of demographic and working experience, Brotheridge and Lee emotional labor scale as well as the ELI accounted

for 18.5% of variance of participants' level of job satisfaction. Beta values of the final models indicated that job satisfaction was best predicted only by higher level of Emotional Sensitivity and Control and less Emotional Dissonance.

Table 9. Results of Hierarchical Regression Analyses for Job Satisfaction (N=437)

	Job Satisfaction		
	Beta	R ²	F
<u>Model 1</u>		.03	3.12*
Gender	-.04		
Education Level	-.06		
Age	-.05		
Working Experience	.18*		
<u>Model 2</u>		.12	10.42**
Gender	-.07		
Education Level	-.07		
Age	.16*		
Working Experience	-.05		
Variety of Emotion Display	.11*		
Surface Acting	-.22**		
Deep Acting	.12*		
Emotion Intensity	.04		
<u>Model 3</u>		.19	11.26**
Gender	-.09		
Education Level	-.05		
Age	.11		
Working Experience	-.05		
Variety of Emotion Display	.08		
Surface Acting	-.09		
Deep Acting	.07		
Emotion Intensity	.02		
Emotional Sensitivity and Control	.18*		
Emotional Dissonance	-.30**		
Emotional Labor Work Conditions	-.01		

Notes: **p<.01 (two-tailed) *p<.05 (two-tailed)

Discussion

Although emotional labor has been explored for nearly two decades after the seminal discussion by Hochschild (1983), this organizational behavior has not been widely examined in the Chinese working population. The purpose of this study was to develop a parsimonious emotional labor scale and it was tested in Chinese employees. Participants recruited in this study were randomly split into two sub-samples, with approximately half of them used for exploratory factor analysis while the remaining half were used for confirmatory factor analysis. Three latent factors were suggested by the exploratory factor analysis and the three rotated factors had also demonstrated fairly satisfactory internal reliability, though the goodness of fit indices failed to support the three-factor solution derived from the exploratory factor analysis. The newly derived scales based on factor analysis were Emotional Sensitivity and Control, Emotional Dissonance and Emotional Labor Work Conditions. Items in these constructs were mostly derived from existing constructs that are currently adopted in other emotional labor studies. Result of factor analysis shed light on the latent factors of emotional labor which represented the initial step for standardizing the measurement tool of emotional labor study.

The present study confirmed the notion that emotional labor is a multi-faceted construct which could not be measured and conceptualized in a uni-dimensional

approach. Findings in this study also reflect the distinctive relations among factors in the present study. For instance, Emotional Sensitivity and Control correlated significantly with other two aspects of ELI, yet there was not significant correlations between Emotional Labor Work Conditions and Emotional Dissonance. Future studies may extend the investigation on the inter-relationships of emotional labor constructs.

Apart from intercorrelations among the ELI, different aspects of ELI also correlated with different work-related variables. Generally speaking, Emotional Dissonance was found to correlate with various psychologically related variables examined in the present study, including psychological distress and all burnout measures. Emotional dissonance is the subjective feeling of employees as it is the subjective experience of the incongruence between the genuine felt and the organizational abided feeling, therefore, emotional dissonance could be regarded as the affective component of emotional labor. This affective aspect of work condition would thus affect the psychological well being as well as the psychological health (distress) of the employees.

Emotional Labor Work Conditions, on the other hand, did not significantly correlate with emotional exhaustion and job satisfaction, yet it was found to correlate with absenteeism and intentions to leave measures. Items in this subscale comprised

of the work conditions and objective experience of interaction with clients. Thus, this component of ELI should represent the cognitive component of emotional labor which consequently affect the work related variables measures (i.e. job satisfaction, intention to leave).

Drawing from the correlation in the present study, it is argued that different emotional labor aspects would affect different aspects of work, and this finding sheds light on previous mixed results of emotional labor with work related variables. For instance, emotional dissonance was found to affect psychological well being, but it did not correlate highly with work withdrawal behaviors. On the other hand, work-related requirements, including frequency, duration and variety of emotional requirement would affect withdrawal behaviors of job incumbents, but it had relatively weak association with other aspect (i.e. psychological health). In other words, the conceptualization of emotional labor would inevitably affect findings. If researchers try to explore the psychological impact of emotional labor, the best way is to define and conceptualize this variable among psychological properties of emotional labor (Emotional Sensitivity and Control in ELI; surface acting, deep acting and emotional dissonance in other emotional labor scale). If, however, researchers are interested to investigate the job outcome (e.g. absenteeism and intention to leave), they may need to measure work related aspects of emotional labor (Emotional Labor

Work Conditions in ELI; duration, frequency and variety of emotion display in other emotional labor scale).

Several job related variables, including burnout, job satisfaction, and psychological distress were used to correlate with dimensions of ELI in order to establish convergent validity. Emotional Sensitivity and Control and Emotional Labor Work Conditions were found to have positive and moderate correlations with one of the burnout subscales, lack of personal accomplishment, yet they did not significantly correlate with emotional exhaustion and depersonalization. The insignificant correlations between Emotional Sensitivity and Control and Emotional Labor Work Conditions with emotional exhaustion partially supported the model proposed by Brotheridge and Lee (2002). In their model, deep acting and surface acting (emotional sensitivity and control in this study) contributed to emotional exhaustion through the degree of authenticity. Deep acting and surface acting did not affect emotional exhaustion directly, but the relations was mediated by the level of authenticity. The insignificant correlation between Emotional Labor Work Conditions echoed previous study by Jones and Rohrer (2002). In their study, display rule perception, including the expression of positive emotions, expression of negative emotions and suppression of emotions were found to have relatively low correlations with all three burnout subscales, the correlations between these variables ranged from

zero to .26.

For phase I, exploratory factor analysis results suggested that Emotional Dissonance emerged as a distinct factor of ELI instead of loading onto different latent factors. Although the role of emotional dissonance had been questioned in the conceptualization (Mann, 1999), Morris and Feldman (1996, 1997) clearly indicated the importance of emotional dissonance in emotional labor study. Factor analysis of the present study provides additional evidence of the importance of emotional dissonance in emotional labor study. Generally speaking, Emotional Dissonance in the present study was found to be a significant variable in predicting those psychological variables as it significantly and positively correlated with emotional exhaustion, depersonalization and psychological distress. Besides, Emotional Dissonance was also found to significantly and negatively correlated with lack of personal accomplishment and job satisfaction. These findings of negative correlation between emotional labor and negative psychological health were generally in line with previous empirical findings (Pugliesi, 1999; Pugliesi & Shook, 1997; Wharton, 1993, 1996). Previous research indicated the linkage between emotional dissonance and burnout (Grandey, 2000; Morris and Feldman, 1996) and emotional labor with burnout (Erickson & Ritter, 2001). The present findings of correlations between Emotional Dissonance score and burnout paralleled previous studies. For

instance, in the study by Zaft, Seifert, Schmutte, Mertini and Holz (2001), emotional dissonance was found to moderately correlate with emotional exhaustion and depersonalization but only weakly with the lack of personal accomplishment.

As mentioned before, Emotional Labor Work Conditions was found significantly correlate with only lack of personal accomplishment and negatively with psychological distress. However, it did not significantly correlate with emotional exhaustion, depersonalization and job satisfaction. One of the interesting findings related to work condition was that it correlated consistently and positively with the absenteeism measures (both sick leave and annual leave taken) and several intention to leave indices, including the intention to leave for half year, one year and five years. Although previous study by Grandey (2000) proposed that emotional labor would affect the organizational well-being, including the performance and withdrawal behaviors, no empirical study had attempted to correlate emotional labor with absenteeism and intention to leave. The present findings provide initial evidence of the linkage between different degree of emotional labor and various job withdrawal behaviors. These findings also provide practical implication to organizations because several work conditions actually foster various types of job withdrawal and intention to leave, therefore, organization should be cautious.

Generally speaking, the three latent factors in ELI found that higher emotional

labor would decrease the job satisfaction of job incumbents. This finding is consistent with numerous previous studies (Bulan, Erickson, & Wharton, 1997; Pugliesi, 1999; Pugliesi & Shook, 1997). Emotional Sensitivity and Control did not correlate significantly with most measures adopted in the present study, yet emotional dissonance were found to correlate with most variables in this study. Based on these findings, we may argue that emotional control is itself not the source of stress, instead it is the emotional dissonance of felt and display emotions that create the psychological distress which affects the job satisfaction and well being of job incumbents and thus heighten the chance of burnout, absenteeism and intention to leave of the participants.

In examining whether the newly derived ELI could provide significant explanatory power beyond existing emotional labor measurement, a series of hierarchical regressions were conducted, with participants' demographic and job satisfaction as the first block, emotional labor scale developed by Brotheridge and Lee (1998) as the second block and the subscales of ELI was entered into the final block. Hierarchical regression models results suggested that, except absenteeism and emotional exhaustion, the ELI could provide significant explanatory power even though all other variables were being controlled. When predicting the overall intention to leave, the new ELI could provide unique exploratory power when the

Brotheridge and Lee emotional labor scale failed to predict this measurement. This finding may be due to the introduction of emotional control into the ELI, which previous study had not directly measure. By incorporating this potentially important construct, the ELI gained unique explanatory power beyond existing emotional labor scale. Future study should thus aim to incorporate potential dimensions under emotional labor to enhance overall explanatory power of the measurement tools.

Confirmatory factor analysis was conducted to validate the suggested three-factor model derived from exploratory factor analysis. According to the chi-square and goodness-of-fit indices, the three factor solutions did not represent a good fit of the data. Several potential factors may have accounted for this pattern. According to Floyd and Widaman (1995), it may be impossible to obtain a satisfactory fit when the analysis examines individual items from a relatively lengthy scale or when items are likely to load significantly on more than one factor. Another possible reason that contributes to the poor fit of the data may due to the low variance explained for the data set. According to Streiner (1994), factor should explain at least 50% of the total variance. Previous study by the Parker, Endler and Bagby (1993) factor analysis of the ways of coping questionnaire illustrated this problem. In their study, confirmatory factor analysis was conducted to confirm the four-factor structure, however, model fitting was not good because factors proposed by the

exploratory factor analysis only accounted for only 36.6% of variance. In the present study, the three factors suggested by the exploratory factor analysis could explain 37.8% of total variance, thus it renders difficulty to confirm the factor structure by confirmatory factor analysis.

Limitations and Future Studies

This study has several limitations and its results should be interpreted with caution. First, participants recruited were mostly human service professionals, including nurse, social workers, occupational therapists and teachers. As discussed by Hochschild (1983), there are many more occupations that involve emotional labor which are not included in the study. Thus, it remains unclear to what extent the present sample represents the population of other job incumbents in local service industry. Besides, female participants had outnumbered their male counterparts in the present study. Although female represents the major work force in various service industries, the imbalanced gender distribution may render results gender-biased. A related issue of the sampling would be small sample size for professional group comparison. The sample gathered in this study comprised mostly by nurses and social workers, other professionals including occupational therapists, teachers as well as librarians had been underrepresented and this unbalanced sample size rendered it hard to make meaningful comparison of emotional labor among these

professions. Future studies should include job incumbents in different service industries and recruit more male participants to increase the overall representativeness. Second, this study relied solely on self-reports of participants regarding their work satisfaction, absenteeism measures, psychological distress and burnout which were often subject to recall and social desirability bias. External validation of participants' self reports on the above areas should be collected from organization staff, including colleagues, supervisors and customers.

The present study adopted a cross-sectional design, in other words, participants across different occupations were recruited in a single time point. Therefore, causal-effect inferences can not be reflected in this study. Future study may adopt a longitudinal design in order to establish the causal-effect inferences for emotional labor and its relations with other job-related variables.

Another concern with the present findings is the relatively low percentage (about 29%) of variance explained by the three factors of the ELI. This finding may be due to the fact that emotional labor is a multi-facet variable and this newly developed scale may not be able to tap various possible facets and attributes of emotional labor. In future studies, more possible facets could be proposed in order to increase the representativeness. Future study may also aim to test the factor invariance across different occupations. It is quite likely that incumbents in different service industries

need to demonstrate different emotional display, for instance, bill collector and police officers need to be sober, while salesperson and customer representatives need to wear a smile. These different emotional displays may represent different emotional requirement, and thus different latent meanings of emotional labor. Thus, confirmatory factor analysis across different industries could be conducted to test robustness of emotional labor factors.

Regarding the validity of the ELI, it has demonstrated both convergent and predictive validity by correlating and predicting several job-related and psychologically related variables. Future studies, however, may also further extend the validity establishment by inserting variables that can also demonstrate divergent validity.

Implications

The newly developed factors demonstrated satisfactory internal reliability and correlated with most work related variables in predicted directions. Thus the new emotional labor inventory conceptualized emotional labor in a more parsimonious way. Regression analyses also confirmed that the newly developed factors could contribute significantly in understanding various job behaviors, including employees psychological health, burnout level, withdrawal behaviors and job satisfaction.

Pervious studies and the present study demonstrated that emotional labor

could negatively affect employees' well being, increase the chance of burnout and deteriorate their psychological health, lower job satisfaction and increase job withdrawal behaviors. Increasing service quality is an inevitable trend for organizations in order to build up the corporate image and maintain clients' satisfaction, thus, emotion labor demands for employees will increase. This will create a practical problem for organization management. On one hand, the organization should acknowledge the importance of providing quality service to clients by standardizing the service quality; on the other hand, increasing demands of emotional labor will negatively affect employees' well being and various work behaviors.

Organizations can remedy the situation through various ways, including personnel selection, training, remuneration restructuring and reference for psychological counseling service. In the personnel selection process, organization should choose applicants with better emotional management. Job applicants with high social monitoring skills may be considered for taking up service providing roles. Self-monitoring refers to the extent to which people observe and control the image of themselves they present in social interactions (Synder, 1987). Synder (1974) found that high self-monitors attend more closely to situational cases about which emotions should and should not be displayed. As people high in social monitoring can change

their emotions expression according to the social interaction, role occupants who engage in greater amounts of self-monitoring should also be more inclined to comply with organizational display norms (Morris & Feldman, 1996). Thus, the ability to switch their emotional expression and emotional state can buffer the job requirement for performing duty with much emotional labor.

Organization should also provide sufficient service training for employees both before and during employment. Training can foster employees' efficacy and increase their sensitivity of the importance of expressing the right emotions.

Apart from personnel selection and training, organizations may need to remedy the potential problem by reforming the compensation system. Steinberg (1999) argued that few client-oriented organizations compensate those who perform emotional labor. Traditional job evaluation systems used by employers to construct a wage hierarchy often, fail to recognize the value of emotional labor. Therefore new approach of remuneration evaluation should be conducted in order to fulfill the pay equity. According to Steinberg, four general dimensions of emotional labor, namely human relations skills, communication skills, emotional effort and responsibility for client well being may be adopted to evaluate and refine the existing remuneration system.

As discussed earlier, prolonged emotional labor will increase the chance of

burnout, intention to leave, absenteeism and heightening of psychological distress of employees. Apart from the human resources practices that have been discussed, organizations should provide psychological counseling for the employees when they had expressed negative job outcomes due to prolong expression of emotional labor. Stress management training as well as counseling, either individual-based or group based intervention can be provided to employees in order to facilitate better coping skills for handling emotional labor.

Footnote

¹ The function of open-ended question is to capture people's perception of emotional labor. The term "emotional management" was adopted instead of emotional labor because according to Wharton (1993), these two terms are equivalent, thus, using the former could facilitate better understanding and expression of ideas. Besides, we have no intention to argue that the term emotional management has excluded the existence of emotional dissonance, emotional control and emotional sensitivity because emotional management should involve mechanism like emotional control and emotional sensitivity towards others

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2. 根據以上的定義，請你舉出一個你在工作上面對顧客的服務或管理的情境。

3. 爲什麼你需要在工作上面對顧客的服務或管理的情境？

Appendix 1: Open-ended Questionnaire Sample

職業: _____ 工作年資: _____ 性別: 男 / 女

這部份是希望了解你在工作上管理情緒的經驗及意見，所以答案並無對錯之分，請你就以下問題發表你的意見。

1. 你會怎樣為 “Management of Own Feelings when dealing with clients” (面對顧客的情緒管理) 在字典中下一個定義呢？

2. 根據以上的定義，請你舉出一個你在工作上面對顧客時管理自己情緒的例子。

3. 為什麼你需要在工作上及面對顧客時的管理自己的情緒呢？

Appendix 2: Emotional Labor Inventory Questions

Deep Acting

- The job requires me wearing a smile, so I would try to make myself happy
- I always think of something happy which enables me to serve clients happily
- It is necessary to change one self's emotions when dealing with clients
- I would not change my genuine feeling in order to satisfy organizational display rule
- If I need to be happy or sober in the job, I would change my internal feelings in order to fulfill this organizational needs
- I would try to change my genuine feeling in order to fulfill the clients' satisfaction
- I would alter my genuine feeling in order to fulfill the organizational requirement

Emotional Control

- I would smile to the customer even though he / she is angry
- I can control my emotions under different situation
- I would not hide my boredom
- When handling different customers' need, I would express different emotions
- when customers were in dismay, I would treat them more empathetically in order to make them feel better
- I have the ability to control emotions, and I would express appropriate emotions under different situations
- I would repress my anger when dealing with clients
- Even though I feel bad, I would try to work light-hearted
- When dealing with angry clients, I would be even more patient

Emotional Dissonance

- I use my genuine feeling to deal with clients
- When dealing with clients, I would not hide my internal feelings
- Most of the work time, my external emotional expression is different from my genuine feeling
- Most of the time, I use my genuine feeling to deal with clients
- I always express organizational desired emotions
- Sometimes, the organizational required emotional expression differs from my genuine feeling
- When dealing with clients, my expressed emotions differs from my genuine feelings
- My emotions often match with the organizational requirement

Importance of Display Rule

- The organization that I am working emphasized whether I can control my emotions
- Understand clients' emotions is vital for job success
- Friendliness and smile are important elements of quality service
- Expressing friendliness and courtesy is important in my work
- Abiding to organizational service standard is vital

Monitoring Self Emotions

- I often pay attention to clients' feeling
- My emotional expression affect clients' feeling and reaction
- I always aware of how people perceive my feeling expression

Monitoring Clients' Emotions

- I attend to customers' feeling

- I understand clients' emotions clearly
- I would pay attention to my clients' emotions

Surface Acting

- The organization expect me to treat clients warmly, therefore regardless of happy or not, I would wear a smile.
- My emotional expression is solely the organizational requirement, it is not my genuine feeling
- In order to satisfy organizational need, I would deliberately express certain emotions
- Slightly changing the facial expression can convey a happy or sober impression to clients
- In order to express the professionalism, I would remain sober

Variety of Emotions

- I need to demonstrate different internal emotions in order to satisfy different customers need
- I need to behave happily when dealing with clients
- My job required different emotional expression

Frequency of Clients' Interaction

- I always need to deal with clients
- I deal with clients most of the time
- Dealing with clients comprised the most of my job

Display Rules

- The society should have some taken for granted rule to handle clients, like policemen should be sober while salesperson should always wear a smile
- I know the appropriate attitude and emotions when dealing with clients out of

common sense

- When dealing with clients, the organization have clear guidance of how I should express my emotions
- When dealing with clients, organization has clear guide-lines of how to deal with clients

Duration of Interaction

- Most interaction with clients is short
- It takes pretty long time to deal with each individual client
- Most of the time, the duration of dealing with each individual client is short

Appendix 3: Preliminary Factor Analysis of ELI

Item Description	1	2	3
5. The job requires me wearing a smile, so I would try to make myself happy	.604	.090	-.201
51. I would try to change my genuine feeling in order to fulfill the clients' satisfaction	.598	.215	.036
53. I would alter my genuine feeling in order to fulfill the organizational requirement	.573	.174	.093
18. The organization expect me to treat clients warmly, therefore regardless of happy or not, I would wear a smile.	.562	-.000	-.346
38. I need to behave happily when dealing with clients	.562	.048	-.284
39. I always express organizational desired emotions	.532	.207	-.130
25. It is necessary to change oneself's emotions when dealing with clients	.512	.064	-.250
14. I always think of something happy which enables me to serve clients happily	.459	.075	-.149
52. Even though I feel bad, I would try to work light-hearted	.442	.045	-.141
48. When dealing with clients, the organization have clear guidance of how I should express my emotions	.441	.038	.144
55. When dealing with clients, organization has clear guide lines of how to deal with clients	.440	.051	.188
1. I would smile to the customer even though he / she is antagonistic	.429	-.337	.052
43. Abiding to organizational service standard is vital	.425	.000	-.348
11. The organization that I am working emphasized whether I can control my emotions	.425	.023	-.337
15. I need to demonstrate different internal emotions in order to satisfy different customers need	.414	.111	-.262
20. When customers were in dismay, I would treat them more empathetically in order to make them feel better	.396	-.201	-.190
42. I always aware of how people perceive my feeling expression	.395	.173	-.287
57. When dealing with angry clients, I would be even more patient	.342	-.302	-.204
34. In order to satisfy organizational need, I would deliberately express certain emotions	.202	.675	.046
22. Most of the work time, my external emotional expression is different from my genuine feeling	.122	.653	.088
49. Sometimes, the organizational required emotional expression differs from my genuine feeling	.185	.544	.093
27. Most of the time, I use my genuine feeling to deal with clients	.290	-.539	-.310
54. When dealing with clients, my expressed emotions differs from my genuine feelings	.043	.537	-.181
7. I use my genuine feeling to deal with clients	.261	-.533	-.292
32. My emotional expression is solely the organizational requirement, it is not my genuine feeling	.109	.519	.262
47. I have the ability to control emotions, and I would express appropriate emotions under different situations	.114	-.443	-.178
3. I can control my emotions under different situation	.074	-.405	-.164
45. If I need to be happy or sober in the job, I would change my internal feelings in order to fulfill this organizational needs	.345	.357	.049
9. The society should have some taken for granted rule to handle clients, like policemen should be sober while salesperson should always wear a smile	.117	.347	.070
28. I would not change my genuine feeling in order to satisfy organizational display rule	.116	.291	-.279
24. I understand clients' emotions clearly	.130	-.291	-.184
56. My emotions often match with the organizational requirement	.181	-.286	.039
46. In order to express the professionalism, I would remain sober	.082	.281	.119
12. I would not hide my boredom	.071	.087	.045
29. I deal with clients most of the time	.132	.016	-.696
37. I would pay attention to my clients' emotions	.255	-.175	-.643

Item Description	1	2	3
36. Dealing with clients comprised the most of my job	.114	.000	-.609
30. Expressing friendliness and courtesy is important in my work	.171	-.249	-.608
2. I always need to deal with clients	.042	-.089	-.592
6. I attend to customers' feeling	.265	-.288	-.555
35. Most of the time, the duration of dealing with each individual client is short	.010	.076	.516
16. Understand clients' emotions is vital for job success	.182	-.273	-.516
26. I often pay attention to clients' feeling	.225	-.239	-.501
23. Friendliness and smile are important elements of quality service	.392	-.220	-.474
31. I know the appropriate attitude and emotions when dealing with clients out of common sense	.424	-.206	-.471
4. Most interaction with clients are short	.204	.042	.405
41. My job required different emotional expression	.309	.181	-.391
19. When handling different customers' need, I would express different emotions	.282	.159	-.389
17. It takes pretty long time to deal with each individual client	-.266	-.086	.367
33. My emotional expression affect clients' feeling and reaction	.347	-.174	-.360
40. Slightly changing the facial expression can convey a happy or sober impression to clients	.119	.217	-.353
21. When dealing with clients, I would not hide my internal feelings	.162	.323	-.336
50. I would repress my anger when dealing with clients	.267	.065	-.303
Variance explained	14.08%	8.49%	5.91%

Appendix 4: Item-Total Correlations of Preliminary ELI Scales

Emotional Sensitivity and Control			Emotional Dissonance			Emotional Labor Work Conditions		
Item	Corrected item-total correlation	Alpha if item deleted	Item	Corrected item-total correlation	Alpha if item deleted	Item	Corrected item-total correlation	Alpha if item deleted
51	0.4581	0.7226	22	0.4374	0.3700	29	0.4030	0.1342
53	0.5004	0.7179	34	0.4235	0.3691	30	0.2620	0.2395
5	0.4623	0.7206	54	0.3263	0.4335	36	0.3305	0.1665
39	0.4039	0.7285	49	0.4102	0.3973	2	0.3078	0.1978
25	0.4435	0.7241	32	0.3424	0.4154	35	-0.1072	0.4452
52	0.3249	0.7377	47	-0.1792	0.5791	50	0.1434	0.3059
14	0.4018	0.7287	3	-0.1516	0.5864	4	-0.1389	0.5035
15	0.3759	0.7321	9	0.2382	0.4603			
55	0.3577	0.7343						
48	0.3332	0.7377						
42	0.2731	0.7439						
20	0.2809	0.7427						
Standardized item alpha		.7518	Standardized item alpha		.4673	Standardized item alpha		.3881

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